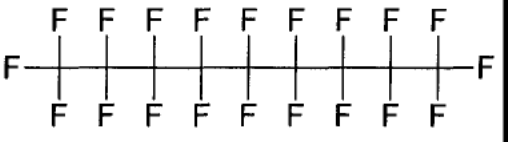
STRUCTURE ACTIVITY TEAM REPORT ver. 04/98 [redacted]	
Case #: L-07-0367	**DCN:**
SAT Date: 8/28/2007	**SAT Chair:** L. Keifer
Submitter: Tracerco	

Chemical Name:

Nonane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-eicosafluoro-

CAS RN:	Trade Name:
375-96-2	FLUTEC TG n-PPCH, Tracerco 450b

Structure



[redacted]

Molecular Formula:	C_9F_{20}		
Molecular Wt. 488	**WT%<500:**	**WT%<1000:**	
MP: -16.00	**BP:**	**Eq. Wt:**	
H2O Sol (g/L): <0.000001	**V.P.** 7.5000		
Max. Prod. Volume (kg/yr): 300	**Physical State:** Liquid		

USE:

Tracer chemical for measuring flow of gas in deep oil/gas bearing geological strata.
STN file CA: 129 references found.
P2REC. CRSS: Forward. P2 Claim: The LVE substance is a substitute for radionuclide tracers to measure the flow rate in oil-bearing strata

Related Case Numbers	Case Role	Related Case Numbers	Case Role

Focus Date: 9-13-07 **Results:** Final Conf Grant

STRUCTURE ACTIVITY TEAM REPORT [redacted] 08/28/07

CASE NUMBER: **L07-0367**

RELATED CASES: [redacted] [redacted] [redacted]

CONCLUSIONS/DISCUSSIONS

TYPE OF CONCERN:	HEALTH	ECOTOX
LEVEL OF CONCERN:	1-2	1

KEYWORDS: NEURO CARDIAC SENS (UNCERT)

SUMMARY OF ASSESSMENT

FATE: Liquid with MP = -16 °C (M)
log Kow = 8.92 (E);
S < 0.001 mg/L at 25 °C (E)
VP = 7.5 torr at 25 °C (M)
BP = 130 °C (M)
H = 2.67E+6 (E)
log Koc = 7.00 (E)
log Fish BCF = 2.18 (E)
POTW removal (%) ≥ 99 via sorption and stripping
Time for complete ultimate aerobic biodeg > mo
Sorption to soils/sediments = v.strong
Volatilization half-life from a standard river = 2 hrs
Volatilization half-life from a standard lake = 9 da
PBT Potential: P3B1T1
*CEB FATE: Migration to ground water = negl

HEALTH: Expect poor absorption via all routes (pchem). In the Standard Review for the analogue [redacted] neurotoxicity was the only effect supported. Uncertain concern for cardiac sensitization.

*CEB HEALTH: Low moderate concern (Dermal, inhalation)

P2 DISCUSSION: SAT judged that replacing radioactive materials with inert materials in the work place is a good idea.

*CCD P2 RECOGNITION: RECOMMENDED

ECOTOX: Predicted (P) and measured (M) toxicity values in mg/L (ppm) are:

fish 96-h LC50	=	*	P
daphnid 48-h LC50	=	*	P
green algal 96-h EC50	=	*	P
fish chronic value	=	*	P
daphnid ChV	=	*	P
algal ChV	=	*	P

Predictions are based on SARs for neutral organic chemicals; SAR chemical class = alkane-C9-perF; MW488; liquid with mp = -16 C (M); log Kow = 8.3 (ACD); S < 0.001 mg/L at 20 C (P); pH7; effective concentrations based on 100% active ingredients, closed vessel with no head space, and mean measured concentrations; hardness <150.0 mg/L as CaCO3; and TOC <2.0 mg/L;
low concern for toxicity;
assessment factor = 10.0
concern concentration = *
*CEB ECOTOX: No releases to water

SAT Co-chair: Leonard Keifer 564-8916

NCSAB SAT REPORT [redacted]

PMN:	L-07-0367	CAS RN:	375-96-2

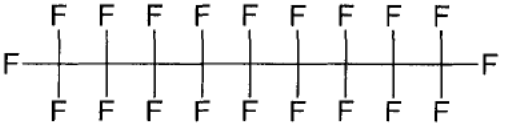
Chemical Name:

Nonane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-eicosafluoro-

Analogs:

Production Volume: 300.00

Structure:



Use:
Tracer chemical for measuring flow of gas in deep oil/gas bearing geological strata.
STN file CA: 129 references found.
P2REC: CRSS: Forward. P2 Claim: The LVE substance is a substitute for radionuclide tracers to measure the flow rate in oil-bearing strata.

Formula:	C_9F_{20}	Eq Wt:		
Mol Weight:	488.07	Wt%<500:		Wt%<1000
MP:	-16.00	BP:	130.00	VP:
H2O Sol (g/L):	<0.000001	Physical State:	Liquid	Log P: 8.3 (ACD)

Endpoint (mg/L)	Est. Value	Meas. Value	Comments
Fish 96-h	*		
Daphnid 48-h	*		
Algal 96-h	*		
Fish ChV	*		
Daphnid ChV	*		
Algal ChV	*		
BCF			

CHEMICAL CLASS: SAR: alkane - perF - C9

ECOTOX CONCERN: H M (L) CONCERN CONCENTRATION *

DATE 8/28/07 ASSESSOR:

OPPT STRUCTURE ACTIVITY TEAM (SAT) MEETING DATE 8-28-07

ATTENDEES	SIGNATURE
CHEMISTRY	
✓ Paul Bickart	Paul Bickart
___ Diana Darling	
___ Rich Engler	
___ Greg Fritz	
___ Daniel Lin	
✓ Kathy Schechter	Kathy Schechter
___ _____	
ENVIRONMENTAL FATE	
___ Bob Boethling	
___ Wen-Hsiung Lee	
✓ Laurence Libelo	
___ David Lynch	
___ Andy Mamantov	
___ _____	
HEALTH	
___ Katherine Anitole	
✓ Michael Cimino	
___ Steve Cragg	
___ Leonard Keifer	
___ David Lai	
✓ Jim Murphy	
___ Deborah Norris	
✓ Ronald Ward	
✓ Yin Tak Woo	Yin Tak Woo
___ _____	
___ _____	
ENVIRONMENTAL EFFECTS	
✓ Gordon Cash	MEMO
✓ Vince Nabholz	
___ Maggie Wilson	
___ _____	
SAT CHAIR/OTHER	
___ Rebecca Jones	
✓ Leonard Keifer	
___ Vince Nabholz	
✓ Jim Kwiat	
___ _____	